

REMARKS

Claims 1-26 were originally pending in the application. Claims 1-26 are rejected. Claims 1, 17, and 20 have been amended. Claims 1-26 remain pending in the application. Favorable reconsideration and allowance of this application is respectfully requested in light of the following remarks.

I. Drawings

The drawings are objected to because the following features are not shown in the drawings: latch, flightings, actuator, self-connecting coupler, safety mechanism, remote controls, means of relocating the segments manually, a hydraulic cylinder.

The limitations of flightings and self-connecting coupler have been deleted from the claims by way of amendments to claims 3 and 11.

Applicant hereby submits Figs. 1-3 that have been amended as follows:

The latch has been enumerated as 57 and shown in Fig. 2.

An actuator has been enumerated as a hydraulic cylinder 21 that is shown in Fig. 3.

A safety mechanism has been enumerated as 31 and shown in Fig. 1.

Remote controls have been enumerated as 17 and shown in Fig. 1.

Applicant does not claim a means for relocating the segments manually in claim 8 as alleged in the Office Action. Rather, claim 8 passively recites a functional limitation that the unloading auger is relocated between a storage position and an unloading position manually. One skilled in the art appreciates that two members connected by a hinge (all of which are illustrated) may be relocated manually. The means for relocating a member manually would be a user's hand, which Applicant asserts is not necessary to illustrate in the drawings.

A hydraulic cylinder 21 is illustrated in Fig. 3, as discussed above.

No new matter has been added by way of the amendments to the drawings. Review and allowance of the amended drawings is respectfully requested.

II. Specification

Applicant has amended the specification from Page 7, line 27 through Page 8, line 18 to reflect the amendments made to the drawings. No new matter has been added by way of these amendments.

III. Claim Objections

In Paragraph 2 of the Office Action, claim 1 is objected to because “A horizontal” should be --a horizontal--. Applicant has amended claim 1 to overcome this objection.

IV. Claim rejections under 35 U.S.C. §112

Claims 2-5 and 11 are rejected because the claim limitation “flightings” has insufficient basis as originally filed. Furthermore, clarification is required regarding the “first and second segment” recited in claim 5 with respect to the “two segments” recited in claim 1.

The claim language related to flightings has been cancelled from the claims by way of amendments to claims 3 and 11. Claims 1 and 5 have also been amended to obviate the objection the “first and second segment” claim limitation.

Withdrawal of the rejections under 35 USC §112 is therefore respectfully requested.

V. Claim rejections under 35 U.S.C. §102

Claims 1-4 and 6-11 are rejected under 35 U.S.C. §102(b) as being anticipated by Scherr. In particular, Scherr is said to disclose a vertical feed section 39 and horizontal outfeed first and second segments 381 and 371 that are joined by a hinge 36.

Overview of Scherr

Scherr discloses two embodiments for discharging grain from a truck box 11 that is mounted on the tail gate 12 of a truck 10. The truck box includes an auger 26 for removing material stored in a frame member 16 that is attached to the tail gate 12. In a first embodiment, Scherr discloses a second auger 33 disposed in a single conduit 32 that is pivotally connected to frame member 16. (See Col. 2, line 41-Col. 3, line 58).

In a second embodiment, the second auger 33 is replaced by a third auger made up of first, second, and third portions 37, 38, and 39, respectively (See Col. 3, line 59-Col. 4, line 8). The first portion 37 is pivotally connected to frame 16. The second portion 38 is pivotally connected to first portion 37. The third portion 39 is pivotally connected to second

portion 38. Portion 39 extends to a lower container and delivers crop material from frame 16 via portions 37, 38, and 39. The end 391 of the third portion 39 provides an extension that defines an outlet to the ambient environment.

In both embodiments, the frame 16 is mounted to the back of a truck (See Figs. 1-3). Accordingly, the conduit(s) 37-39 extend outwardly from the frame 16 in a vertical plane.

Scherr's system thus suffers from the very disadvantages that the present invention is intended to overcome. First, Scherr's augers 26, 33, and 37-39 extend beyond the rear end of the truck, thereby preventing difficulties when operating the truck near obstacles such as trees, telephone poles, buildings, and other vehicles. Second, the extension 391 of the third portion 39 raises the manufacturer's shipping costs for the combine, and further requires additional storage space on the farm. (See Background of the Invention Section, Pages 3-4).

Claims 1-4

Independent claim 1, as amended, recites an unloading auger in an agricultural combine for removing a crop material from a storage bin. The auger includes an infeed section coupled to an outlet of the storage bin. An outfeed section includes a first segment coupled to the infeed section and a second segment hingedly connected to the first segment. The second segment defines an auger exit opening for delivering the crop material to the ambient environment. The first and second segments can be relatively pivoted in a substantially horizontal plane between a storage position and coaxially connected unloading position while maintaining the infeed section in a substantially vertical orientation.

Scherr's first embodiment merely includes a single conduit 32 containing auger 33. This embodiment clearly fails to anticipate the claimed horizontal outfeed section including a first segment hingedly connected to a second segment.

Scherr's second embodiment also does not anticipate claim 1 as amended. In particular, conduit 39 is not a vertical feed section as alleged in the Office Action. Claim 1 recites that a vertical feed section is coupled to an outlet of a storage bin. Scherr's conduit 39 is not even connected to a storage bin. Rather, Scherr's only conduit that is arguably connected to a storage bin is conduit 37. However, conduit 37 rotates between a vertical orientation (when the assembly is in a stored position) and a horizontal orientation (when the assembly is in an unloading position).

Furthermore, Scherr fails to teach or suggest the claimed outfeed section including a first segment coupled to the infeed section and a second segment hingedly connected to the first segment. As stated above, the claimed first and second segments pivot in a substantially horizontal plane. Scherr's portions 37-39 all pivot in a vertical plane. The structure recited in claim 1 enables an unloading auger to be mounted onto an upper surface of a combine without extending beyond the rear of the combine. Scherr is unable to achieve this advantage. Moreover, none of the cited references, even when combined with Scherr, teaches or suggests all claim limitations recited in independent claim 1.

Because Scherr differs both structurally and functionally from the present invention as recited in claim 1, Applicant asserts that claim 1 is allowable over the cited reference. Withdrawal of the rejection of claim 1 (and corresponding dependent claims 2-4) is therefore respectfully requested.

Claims 6-11

Independent claim 6, as amended, recites an agricultural combine having a storage bin. An unloading auger unloads a crop material from the storage bin, and includes a horizontal section in communication with the storage bin, wherein the horizontal section has a plurality of segments. A hinged joint that pivotally connects each of said plurality of segments that allows the segments to be relatively pivoted in a substantially horizontal plane.

As discussed above, Scherr fails to disclose a horizontal section in communication with the storage bin that includes a plurality of segments that are hingedly connected so as to be pivoted in a substantially horizontal plane. Scherr only discloses sections that are pivoted in a vertical plane. Scherr is thus incapable of being connected to an upper surface of a truck, and therefore can not achieve advantages that are realized by the present invention.

Moreover, even if Scherr is combined with either Pakosh or Howell, the combination of references fails to disclose an auger as recited in claim 6. In particular, as the Office Action correctly points out in Paragraph 8, Pakosh and Howell do not disclose hinged and relocated first and second segments from operation and storage position. Because Pakosh and Howell do not disclose hinged segments, and because Scherr discloses hinged segments in a vertical plane, the combination would not teach or suggest a plurality of segments pivotally connected so as to pivot in a horizontal plane.

Applicant therefore asserts that claim 6 is patentable over the cited prior art. Withdrawal of the rejection of claim 6 (and corresponding dependent claims 7-11) under 35 USC §102 is respectfully requested.

VI. Claim rejections under 35 U.S.C. §103

Claims 5 and 12-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Scherr in view of either Pakosh or Howell. Applicant cites the allowability of corresponding independent claims 1 and 6 as providing sufficient basis for the allowance of corresponding dependent claims 5 and 12-14. Accordingly, withdrawal of the rejection of claims 5 and 12-14 is respectfully requested.

VII. New Claims

Claim 15 has been added that depends from claim 1 and recites that the second segment defines an auger exit opening for delivering the crop material to the ambient environment. Applicant cites the allowability of independent claim 1 as a sufficient basis for the allowance of claim 15. Formal allowance of claim 15 is therefore respectfully requested.

Claim 16 has also been added that recites the storage bin as having an upper surface, wherein the horizontal section is in communication with the upper surface. None of the cited references, alone or in combination teach or suggest this claim limitation. Accordingly, formal allowance of claim 16 is respectfully requested.

VII. Conclusion

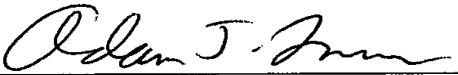
Applicant has introduced no new matter in making the above amendments and antecedent basis exists in the specification and claims as originally filed for each amendment.

In view of the above amendments and remarks, Applicant believes claims 1-16 of the present application recite patentable subject matter and allowance of the same is requested. The Examiner is invited to contact the undersigned at the number below if such would advance the prosecution of this application.

No fee in addition to the fees already authorized in this and accompanying documentation is believed to be required to enter this amendment. However, if an additional fee is required for this or any other communication, please charge Deposit Account No. 17-0055 in the amount of the fee.

Respectfully submitted,

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